



# NEET

## MODEL QUESTIONS

DAY-9

### Subject : PHYSICS

- A machine gun of mass 30 kg fires 15 bullets per second. The mass of each bullet is 60 g and the velocity of the bullet when it leaves the gun is 300 m/s. The force required to hold the gun while firing is  
(1) 45 N (2) 24 N (3) 450 N (4) 270 N
- A time dependent Force  $f = 5t$  acts on a particle of mass 2kg. If the particle starts from rest, the work done by the Force during the first 2 seconds will be  
(1) 22 J (2) 4.5 J (3) 25 J (4) 9 J
- Identify the correct statement about gravitational constant  
(1) It is a force  
(2) It has no units  
(3) It depends on value of masses  
(4) It does not depend on the nature of medium in which bodies are kept.

### Subject : CHEMISTRY

- Which method is used to remove oxygen and nitrogen impurities in Zr and Ti.  
1) Mond process (2) Zone refining  
3) Van-Arkel method (4) Chromatographic method
- Assertion (A): Physical adsorption is an exothermic process, but its enthalpy of adsorption is quite low i.e., 20–40 KJ/mole.  
Reason (R): Because, the attraction between gas molecules and solid surface is only due to weak Van der Waal's forces.  
(1) (A) and (R) are correct, (R) is the correct explanation of (A).  
(2) (A) and (R) are correct, (R) is not the correct explanation of (A).  
(3) (A) is correct, (R) is incorrect.  
(4) (A) is incorrect, (R) is correct.
- Choose the incorrect combination.  
(1) Zymase - Glucose → Ethyl alcohol and CO<sub>2</sub>  
(2) Diastase - Starch → Maltose  
(3) Invertase - Sucrose → Glucose and fructose  
(4) Urease - Protein → Amino acids

Questions Provided by  
**VETR II NEET GATEWAY**

### Subject : BOTANY

- Haplo-diplontic life cycle is found in  
(1) Volvox (2) Fucus  
(3) Spirogyra (4) Kelps
- Match the following.  
(a) Calcium (i) DNA and RNA synthesis  
(b) Magnesium (ii) Main constituent of vitamins  
(c) Sulphur (iii) Protein synthesis  
(d) Potassium (iv) Cell wall synthesis  
(1) (a)-ii, (b)-iii, (c)-i, (d)-iv  
(2) (a)-iii, (b)-iv, (c)-ii, (d)-i  
(3) (a)-iv, (b)-i, (c)-ii, (d)-iii  
(4) (a)-i, (b)-ii, (c)-iv, (d)-iii
- Which of the following belongs to Ascomycetes?  
(1) Rhizopus (2) Agaricus  
(3) Claviceps (4) Colletotrichum

### Subject : ZOOLOGY

- Consider population interactions.

Species A	Species B	Name of Interaction
+	0	X
-	0	Y

- X-Mutualism, Y-Competition  
(2) X-Commensalism, Y-Amensalism  
(3) X-Competition, Y-Mutualism  
(4) X-Amensalism, Y-Commensalism
- If N is the population density at time t then its density at time t+1 is  
(1)  $N_t = N_{t+1} + [(B+I) - (D+E)]$   
(2)  $N_{t+1} = N_t + [(B+I) - (D+E)]$   
(3)  $N_t = N_{t+1} + [(D+E) - (B+I)]$   
(4)  $N_{t+1} = N_t + [(D+E) - (B+I)]$
- In phenylketonuria, the phenylalanine is accumulated and converted into  
(1) Phenyl acetic acid (2) Phenyl pyruvic acid  
(3) Phenyl oxalic acid (4) Phenyl benzoic acid

Answer Keys:

1	2	3	4	5	6	7	8	9	10	11	12
(4)	(3)	(4)	(3)	(1)	(4)	(4)	(3)	(3)	(2)	(2)	(2)



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